

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

DYFAN, LLC,
Plaintiff

-v-

TARGET CORPORATION,
Defendant

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W-19-CV-00179-ADA

CLAIM CONSTRUCTION ORDER

Before the Court are the parties’ claim construction briefs: Plaintiff Dyfan, LLC’s opening, responsive, and reply briefs (ECF No. 32, 41, and 45, respectively) and Defendant Target Corporation’s opening, responsive, and reply briefs (ECF No. 31, 40, and 44, respectively). The Court held the Markman hearing on December 19, 2020. ECF No. 65. During that hearing, the Court informed the Parties of the constructions it intended to enter for all terms. This Order does not alter any of those constructions.

I. BACKGROUND

Dyfan filed this lawsuit on February 28, 2019, alleging that Target infringed U.S. Patent Nos. 9,973,899 (“the ’899 Patent”) and 10,194,292 (“the ’292 Patent”). The ’292 Patent is a continuation of the ’899 Patent. Both patents are entitled “System for location based triggers for mobile devices.”

The patents-in-suit describe techniques for “providing a location based trigger for a mobile device.” ’899 Patent at 4:12-14. The “location” may be “a point (e.g. a particular geographical coordinates), an area (e.g. a set of geographical coordinates, a city, etc.), a volume, a road (or segment thereof), a place of business, a road intersection, [and/or] a landmark[.]” *Id.* at 4:23-27. The user’s mobile device may receive messages from broadcast short-range communication units

(BSRCUs). *Id.* at 1:22-2:6. The user’s mobile device may also send messages to the BSRCUs. *Id.* at 2:8-11. Transmission from the BSRCU to the user’s mobile device may cause visual information to be display on the mobile device. *Id.*

II. LEGAL STANDARD

a. Claim Construction Principles Generally

The general rule is that claim terms are generally given their plain and ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (vacated on other grounds). The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313.

“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony also may be helpful, but an expert’s conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

There “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* at 1365. To disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at 1366. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

b. Claim Construction Principles Regarding Means-Plus-Function Claims

Section 112, Paragraph 6¹ provides that a structure may be claimed as a “means ... for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002). There is a rebuttable presumption that § 112, ¶ 6 applies when the claim language includes “means” or “step for” terms, and that it does not apply in the absence of those terms. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). “When a claim term lacks the word ‘means,’

¹ The AIA version of § 112, ¶ 6 is § 112(f), which has no substantial differences as compared to 112, ¶ 6. The Court will refer to these terms as § 112, ¶ 6 hereinafter.

the presumption can be overcome and § 112, ¶ 6 will apply if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* at 1349 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed.Cir.2000)).

Section 112, Paragraph 6 limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function claim is a two-step process. First, courts determine the function of the means-plus-function limitation. *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). Second, courts determine “the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* The structure disclosed in the specification is “corresponding” structure only if “the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005).

If the corresponding structure is a special-purpose computer function, the specification must provide an algorithm for the software function. *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013) (“When dealing with a ‘special purpose computer-implemented means-plus-function limitation,’ we require the specification to disclose the algorithm for performing the function.”). The algorithm may be described in “any understandable terms,” such as “as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.” *Id.*

c. Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 911. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co., Ltd. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

In the context of a claim subject to 35 U.S.C. § 112, ¶ 6, the claim is invalid as indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed function. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim.” *Id.* at 1352.

III. LEGAL ANALYSIS

The Parties dispute the meanings of the thirty terms. ECF No. 46. Of these, twenty-five are potentially subject to § 112, ¶ 6. *Id.*

a. Non-means-plus-function terms

The parties dispute the meaning of five non-mean-plus-function terms. *Id.* at 2-3.

Claim Term	Dyfan’s Proposed Construction	Target’s Proposed Construction
“building including a plurality of facilities therein” (’292 Claims 1, 15, 28)	Plain-and-ordinary meaning	“building containing two or more distinct venues or stores, each built, installed, or established to serve a particular purpose, brand or company”

“shopping mall” (’899 Claims 2, 7, 12, 30; ’292 Claims 4, 13, 26, 29)	Plain-and-ordinary meaning	Plain and ordinary meaning, i.e. “building containing two or more distinct and independent retail stores”
“an identifier including at least three fields” (’899 Claim 1)	Plain-and-ordinary meaning	“identifier subdivided into at least three data locations”
“an address portion” (’899 Claims 1, 7, 9, 11, 30; ’292 Claim 4)	Plain-and-ordinary meaning	a header identifying the destination of the message”
“output, via the at least one mobile device” / “causing to be output, via the at least one mobile device” / “cause to be output, via the at least one mobile device” (’899 Claims 1, 7, 9, 11; ’292 Claims 1, 15, 28)	Plain-and-ordinary meaning	“delivering from the at least one mobile device/causing the delivery from the at least one mobile device”

After reviewing the parties’ briefing, the Court determines that “building including a plurality of facilities therein,” “shopping mall,” “an identifier including at least three fields,” “an address portion,” and “output, via the at least one mobile device” / “causing to be output, via the at least one mobile device” / “cause to be output, via the at least one mobile device” each be given their plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it. For all these terms, neither of the exceptions to the general rule that plain and ordinary meaning applies. *Thorner*, 669 F.3d at 1365. Furthermore, none of these terms are difficult technical terms for which a construction would help the jury understand the meaning of the term. *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 2:12-cv-800-WCB, 2014 WL 3735222, at *2 (E.D. Tex., July 28, 2014). Therefore, the Court need not provide any additional construction.

b. Potentially means-plus-function terms

Of the remaining twenty-five terms, Dyfan contends that none of them are subject to § 112, ¶ 6 and proposed plain-and-ordinary meaning for all terms. ECF No. 46 at 3-14. Target contends

that all of them are subject to § 112, ¶ 6 and that all twenty-five terms are indefinite due to lack of corresponding structure. *Id.*

No.	Claim Term	Dyfan's Proposed Construction	Target's Proposed Construction
6	“an application [computer code] configured for[to be] execution [executed] by at least one of a plurality of mobile devices . . . the application when executed causes the at least one mobile device to [the computer code, when executed, configured to] [the application, when executed, configured to] . . .[cause] display of an option via a display of the at least one mobile device” ('899 Claims 1, 7, 9, 11)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112(6) Function: “[cause / causes the at least one mobile device to] display of an option via a display of the at least one mobile device” Structure: Indefinite
7	“code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to . . . cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device” ('292 Claims 1, 15, 28)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device” Structure: Indefinite
8	“an application configured for execution by [configured to be executed by] at least one of a plurality of mobile devices . . . the application when executed causes the at least one mobile device to [configured to] . . . receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the Bluetooth [first] wireless communications protocol, of the	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “receive an indication of a receipt, without solicitation from the at least one broadcast short- range communications unit and via the Bluetooth [first] wireless communications protocol, of the one or more messages including the address portion and the identifier including the at least three fields [, the plurality of fields,] and the at least one value”

	<p>one or more messages including the address portion and the identifier including the at least three fields [, the plurality of fields,] and the at least one value” / “computer code configured for execution by at least one of a plurality of mobile devices . . . the computer code, when executed, configured to . . . receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the short-range first wireless communications protocol, of the one or more messages including the address portion, the at least three fields, and the at least one value” / “code configured for execution by at least one of a plurality of mobile devices . . . the code, when executed, configured to . . . receive an indication of a receipt from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value”</p> <p>(’899 Claims 1, 7, 9, 11; ’292 Claims 1, 15, 28)</p>		<p>/ “receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the short-range first wireless communications protocol, of the one or more messages including the address portion, the at least three fields, and the at least one value” / “receive an indication of a receipt from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value”</p> <p>Structure: Indefinite</p>
9	<p>“code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to . . . receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value” (’292 Claims 1, 15, 28)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value”</p> <p>Structure: Indefinite</p>

10	<p>“said application, when executed, further configured to cause the at least one mobile device to . . . in response to the receipt, from the at least one server and via the another wireless communications protocol, of the response message including the particular location-relevant information; control, utilizing the application, the one or more mobile device application actions of the application including causing to be output, via the at least one mobile device, the mobile device application visual information based on the particular location- relevant information” (’899 Claim 1)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “in response to the receipt, from the at least one server and via the another wireless communications protocol, of the response message including the particular location- relevant information; control . . . the one or more mobile device application actions of the application including causing to be output, via the at least one mobile device, the mobile device application visual information based on the particular location-relevant information”</p> <p>Structure: Indefinite</p>
11	<p>“said application, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information: cause, utilizing the application, the one or more mobile device application actions including causing to be output, via the at least one mobile device, the visual information based on the particular location-relevant information” / “computer code, when executed, further configured to . . . in response to [after] the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information from the at least one server and via the second wireless communications protocol; cause, utilizing the computer code, the one or more mobile device actions including causing to be output, via</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information: cause, utilizing the application, the one or more mobile device application actions including causing to be output, via the at least one mobile device, the visual information based on the particular location-relevant information” / “in response to [after] the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information from the at least one server and via the second wireless communications protocol; cause, utilizing the computer code, the one or more mobile device actions including causing to be output, via the at least one mobile device, the visual information</p>

	the at least one mobile device, the visual information based on the particular location-relevant information” / “code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” ('899 Claims 7, 9, 11; '292 Claim 1)		based on the particular location-relevant information” / “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” Structure: Indefinite
12	“said code, when executed, further configured to . . . in response to the receipt, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, of the first response message including the first location-relevant information [of the first location-relevant information]: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” ('292 Claims 15, 28)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “in response to the receipt, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, of the first response message including the first location-relevant information [of the first location-relevant information]: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” Structure: Indefinite
13	“said code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual information is caused to be output	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual

	based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” (’292 Claim 1)		information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” Structure: Indefinite
14	“said code, when executed, further configured to . . . after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” (’292 Claim 15)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” Structure: Indefinite
15	“said code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information

	the second location-relevant information” (’292 Claim 28)		based on the second location-relevant information” Structure: Indefinite
16	“the system is configured such that, after the indication of the user input is received and after an initial instance of the output of the mobile device application visual information including the image [the output of the visual information] is caused, subsequent instances of the output of the mobile device application visual information including different images [the output of the visual information] are capable of being caused as a user moves among a plurality of the facilities of the building [as a user moves,], without requiring [necessitating] additional subsequent user input” (’899 Claims 1, 7, 9)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the indication of the user input is received and after an initial instance of the output of the mobile device application visual information including the image [the output of the visual information] is caused, subsequent instances of the output of the mobile device application visual information including different images [the output of the visual information] are capable of being caused as a user moves among a plurality of the facilities of the building [as a user moves,], without requiring [necessitating] additional subsequent user input” Structure: Indefinite
17	“the system is further configured such that, after the indication of the user input is received and after the output of the visual information is caused, subsequent output of different visual information is caused as the at least one mobile device is moved among a plurality of the facilities of the building” (’899 Claim 11)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the indication of the user input is received and after the output of the visual information is caused, subsequent output of different visual information is caused as the at least one mobile device is moved among a plurality of the facilities of the building” Structure: Indefinite
18	“the system is further configured such that the option and the user input permit the user to determine whether the control of the one or more mobile device application actions is triggered” (’899 Claim 1)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the option and the user input permit the user to determine whether the control of the one or more mobile device application actions is triggered”

			Structure: Indefinite
19	“the system is further configured [configured] such that the option and the user input permit the user to influence whether the one or more mobile device actions is caused” (’899 Claim 7, 9)	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the option and the user input permit the user to influence whether the one or more mobile device actions is caused”</p> <p>Structure: Indefinite</p>
20	“the application, when executed, is configured to permit a determination as to whether the one or more mobile device application actions including causing to be output the visual information is triggered” (’899 Claim 11)	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “permit a determination as to whether the one or more mobile device application actions including causing to be output the visual information is triggered”</p> <p>Structure: Indefinite</p>
21	“the system is configured such that different brand-specific visual information is caused to be output as the user moves among the plurality of facilities of the shopping mall” “the system is configured such that different product-type-specific visual information is caused to be output as the user moves among the different locations of the retail store” (’899 Claim 7, 9)	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “different brand-specific visual information is caused to be output as the user moves among the plurality of facilities of the shopping mall” / “different product-type-specific visual information is caused to be output as the user moves among the different locations of the retail store”</p> <p>Structure: Indefinite</p>
22	“the system is configured such that the output of the mobile device application visual information [the visual information] is conditionally caused based on whether a mobile device-specific threshold has been met” / “the system is configured such that the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device-specific threshold has been met”	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the output of the mobile device application visual information [the visual information] is conditionally caused based on whether a mobile device-specific threshold has been met” / “the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device-specific threshold has been met”</p>

	('899 Claims 4, 14; '292 Claims 5, 18)		Structure: Indefinite
23	<p>“the system is configured such that, after the receipt of the indication of the user input, the visual information is automatically caused to be output, in response to the receipt of the indication of the receipt of the one or more messages that are broadcasted after the receipt of the indication of the user input” / “the system is configured such that, after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input”</p> <p>('899 Claim 18; '292 Claims 8, 21)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the receipt of the indication of the user input, the visual information is automatically caused to be output, in response to the receipt of the indication of the receipt of the one or more messages that are broadcasted after the receipt of the indication of the user input” / “after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input”</p> <p>Structure: Indefinite</p>
24	<p>“the system is configured such that the visual information is automatically caused to be output without requiring further communication with the at least one broadcast short-range communications unit, after the receipt of the indication of the receipt of the one or more messages”</p> <p>('899 Claim 19)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the visual information is automatically caused to be output without requiring further communication with the at least one broadcast short-range communications unit, after the receipt of the indication of the receipt of the one or more messages”</p> <p>Structure: Indefinite</p>

25	<p>“the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one [first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one [second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages” (’292 Claims 1, 15, 28)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the first visual information is automatically caused to be output without requiring communication of the at least one [first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one [second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages”</p> <p>Structure: Indefinite</p>
26	<p>“the system is configured such that the one or more mobile device application actions is based on user feedback information received from a user of the at least one mobile device” (’899 Claim 23)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the one or more mobile device application actions is based on user feedback information received from a user of the at least one mobile device”</p> <p>Structure: Indefinite</p>
27	<p>“the system is configured such that both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device” (’292 Claims 11, 25)</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device”</p> <p>Structure: Indefinite</p>
28	<p>“the system is configured such that the subsequent output of the different visual information is capable of being caused without</p>	Plain-and-ordinary meaning	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “the subsequent output of the different visual information</p>

	additional user input after the user input” (’899 Claim 25)		is capable of being caused without additional user input after the user input” Structure: Indefinite
29	“the system is configured such that both the first visual information and the second visual information are output without additional user input after the user input” (’292 Claim 12)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “both the first visual information and the second visual information are output without additional user input after the user input” Structure: Indefinite
30	“the system is configured such that the particular location- relevant information is located based on the at least on value” (’899 Claim 28)	Plain-and-ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the particular location-relevant information is located based on the at least on value” Structure: Indefinite

In its briefing, Dyfan divided the above terms into two groups: Terms 6-15 and Terms 16-30 and made identical arguments for each group of terms. ECF No. 32 at 13-16; ECF No. 41 at 13-22. Target, in its briefing, divided the above terms into four groups: Terms 10-12, Terms 13-15, Terms 16-17, 21, 28-29, and Terms 23-25. ECF No. 31 at 15-23. Target contends that the same arguments apply to the remaining terms, *i.e.*, Terms 6-9, 18-20, 22, 27, 30.² *Id.* at 9 n.4. Dyfan does not appear to contest this. ECF Nos. 32 at 13-15 (making common arguments for Terms 6-15), 15-16 (making common arguments for Terms 16-30); 41 at 13-20 (Terms 6-15), 20-22 (Terms 16-30); 45 at 3-11 (Terms 6-30). Because Target’s grouping is more fine-grained, the Court chooses to use its groupings.

² Target appeared omit Term 26 in its footnote. ECF No. 31 at 9 n.4. The Court assumes that this was a mere oversight and that the same arguments made for similar terms, *e.g.*, Term 27, are equally applicable to Term 26.

Prior to the *Markman* hearing, the Court notified the parties that it had selected one representative term from of the four groups, namely:

- **Group 1: Terms 10, 11, 12**
 - **Representative term:** Term 10 from Joint Statement (“said application, when executed, further configured to cause the at least one mobile device to . . . in response to the receipt, from the at least one server and via the another wireless communications protocol, of the response message including the particular location-relevant information; control, utilizing the application, the one or more mobile device application actions of the application including causing to be output, via the at least one mobile device, the mobile device application visual information based on the particular location- relevant information”)
- **Group 2: Terms 13, 14, 15**
 - **Representative term:** Term 14 from Joint Statement (“said code, when executed, further configured to . . . after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”)
- **Group 3: Terms 16, 17, 21, 28, 29**
 - **Representative term:** Term 28 from Joint Statement (“the system is configured such that the subsequent output of the different visual information is capable of being caused without additional user input after the user input”)
- **Group 4: Terms 23, 24, 25**
 - **Representative term:** Term 24 from Joint Statement (“the system is configured such that the visual information is automatically caused to be output without requiring further communication with the at least one broadcast short-range communications unit, after the receipt of the indication of the receipt of the one or more messages”)

Dyfan correctly points out that because the word “means” does not appear in any of the 25 terms, the presumption is that § 112, ¶ 6 does not apply. ECF No. 32 at 13.

Dyfan also points out that the during prosecution, the applicant informed PTO that it did not “intend” that § 112, ¶ 6 applied to any of these terms. *Id.* at 12. Target correctly contends that the Federal Circuit rejected this argument by holding that the “inventor’s subjective intent is irrelevant to the issue of claim construction.” ECF No. 40 at 4 (quoting *Howmedica Osteonics*

Corp. v. Wright Med. Tech., Inc., 540 F.3d 1337, 1347 (Fed. Cir. 2008).). Therefore, the Court will ignore applicant's prosecution statements.³

During the hearing, Target elected to start its argument with the Group 2 terms.

c. Group 2 terms: Terms 13, 14, and 15

Target contends that “code” is a nonce word. ECF No. 31 at 11-12. Target further contends that the “claim term ‘code’ cannot itself constitute sufficient structure to perform this recited, special purpose function.” *Id.* at 20, 15. Target further contends because “code” is defined by its recited special purpose function and the claims do not recite a specific algorithm, § 112, ¶ 6 applies. *Id.* Target also contends that these terms are indefinite due to lack of corresponding structure. *Id.* at 19. More specifically, Target contends the claims are indefinite because the specification does not disclose a “specific algorithm that is clearly linked to performing this representative function.” *Id.* Target also contends that Dyfan “does not identify any particular structure in any off-the-shelf software or existing wireless communication specification (*e.g.*, Bluetooth specification mentioned in passing in the '584 Provisional) that is specific to performing the entirety of any of the particular recited functions of disputed Terms 6-30. ECF No. 44 at 7.

Dyfan contends that the Federal Circuit have held that “code” and “application” are not substitutes for “means.” ECF No. 41 at 15. Dyfan provides at least four arguments in support of its contention. First, Dyfan points to a statement that the applicant made during prosecution that this claim term (and the others in the patents-in-suit) were not intended to be subject to § 112, ¶ 6. ECF No. 32 at 12. Second, Dyfan claims that Terms 6-15 are part of a system claim and thus are

³ Furthermore, if the combination of the presumption that a term without “means” is not subject to § 112, ¶ 6 and an applicant's intention reciting the same was sufficient to prevent the application of § 112, ¶ 6, an applicant could simply draft all of his/her claims with functional language, but without the word “means,” and state that the claims were not intended to be subject to § 112, ¶ 6 in order to avoid being subject to § 112, ¶ 6. Such an approach would completely bypass all of the restrictions placed on means-plus-function claiming.

“tethered to structures recited in the claims.” ECF No. 41 at 14. Third, Dyfan cites to *Zeroclick, LLC v. Apple Inc.* as an example where the Federal Circuit found that “program” and user interface code” were not nonce words used as a substitute for “means” and were not subject to § 112, ¶ 6. 891 F.3d 1003, 1008 (Fed. Cir. 2018). Fourth, Dyfan contends that the mobile device executes the code specified in Term 14. ECF No. 45 at 8 (“Terms 10-15, to paraphrase, likewise specify that an application (a known term of art to a user) or code when executed by a mobile device, outputs via a mobile device particular information in response to information the mobile device with the application or code receives.”).

Target counters that *Zeroclick* is distinguishable because for two reasons. First, Target argues that the “Federal Circuit’s finding that these terms were not subject to § 112, ¶ 6 was on the basis that the defendant (Apple) did not provide any evidentiary support for such a construction and the district court ‘failed to undertake the relevant inquiry and make related factual findings [to support such a construction].” ECF No. 40 at 5. Second, Target argues that the “Federal Circuit’s decision in *Zeroclick* reflects a fact-dependent analysis that was informed by the particular claims and the specification at issue in that case.” *Id.* at 6. More specifically, Target argues that “in sharp contrast to the *Zeroclick* disclosure that referenced existing, specific and known structures,” the applicant “repeatedly emphasized that the invention concepts were not limited to any particular structure.” *Id.* at 7.

As a starting point, because the claim term does not contain the word “means,” the Court starts with the presumption that § 112, ¶ 6 does not apply. *Williamson*, 792 F.3d at 1349.

Examining the claim term shows that it recites purely functional language. More specifically, the claim term recites that the code “cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” after two

conditions are met (“after the first visual information is caused to be output based on the first location-relevant information” and “after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information”). In short, the claim term only requires that the code causes the second visual information to be output. As such, the code “is defined only by the function that it performs.” *Cypress Lake Software, Inc. v. Samsung Elec. Am. Inc.*, 382 F. Supp. 3d 586, 615 (E.D. Tex. May 10, 2019).

Although the claim recites several components (*e.g.*, “broadcast short-range communications unit,” “mobile devices,” “code” / “computer code” / “application,” and “server”), none of these components constitute sufficient structure to perform the recited function. Although Dyfan contends that the “mobile device” provides the necessary structure (given that it executes the “code” in Term 14), the Court finds that a POSITA would understand that “mobile device” is similar to a “computer” or “processor” in terms of structure. More specifically, like a “computer” or “processor,” the “mobile device” is a general-purpose component which, in this case, executes generic “code.” Putting it differently, because the only part of a “mobile device” that “code” interacts with is the processor of the mobile device, reciting a “mobile device”—and the associated processor therein by implication—does not add any additional structure beyond “code” itself. As such, the Court does not consider the mobile device to provide sufficient structure.⁴ Additionally, none of these components perform the recited special-purpose computer functions. Therefore, the Court concludes that this term—and other terms in this group—are subject to § 112, ¶ 6. *Id.*

⁴ Were the Court to consider “mobile device” to be sufficient structure for “code,” then an applicant could simply recite two nonce words—“processor” and “code”—together in the claim in order to essentially write the claim in means-plus-function format without being subject to § 112, ¶ 6.

Because § 112, ¶ 6 applies and the corresponding structure is a special-purpose computer function, the specification must provide an algorithm for the software function. *Function Media*, 708 F.3d 1310, 1318 (Fed. Cir. 2013) (“When dealing with a ‘special purpose computer-implemented means-plus-function limitation,’ we require the specification to disclose the algorithm for performing the function.”). Target contends that because the specification does not contain an algorithm that performs the claimed function, the claim is indefinite for lack of corresponding structure. *See, e.g.*, ECF No. 31 at 14-15.

Dyfan does not point to any algorithm in the specification, but appears to only contend that Target has not demonstrated that the disputed limitations are indefinite by clear and convincing evidence. *See, e.g.*, ECF No 41 at 19-20.

After reviewing the specification and considering the parties’ arguments, the Court concludes that the specification does not disclose an algorithm that performs the claimed function. Therefore, because the specification does not disclose an algorithm for the claimed special-purpose computer-implemented function, the claim is indefinite for failing to disclose corresponding structure. *Function Media*, 708 F.3d at 1332.

Likewise, because representative Term 14 is the indefinite, Terms 13 and 15 are also indefinite for failing to disclose corresponding structure.

d. Group 1 terms: Terms 10, 11, and 12

Because Dyfan made the same arguments for the Group 1 terms as it did for the Group 2 terms, the Court likewise concludes that the terms in this group are subject to § 112, ¶ 6 and are also indefinite for lack of corresponding structure. ECF Nos. 32 at 13-15 (making common arguments for Terms 6-15), 41 at 13-20 (Terms 6-15); 45 at 3-11 (Terms 6-30); *see also* Markman Tr. at 38:23-39:2.

e. Group 3 terms: Terms 16, 17, 21, 28, 29

For these terms, Target contends that “system” is a “well-recognized” nonce word. ECF No. 31 at 21. Target further contends that the claims do not specify which of the components in the system—“building,” “short-range communications unit,” “plurality of mobile devices,” “code,” or “server”—perform this particular function. *Id.* Target contends that the terms in Group 3 are the “epitome” of functional claiming and thus must be subject to § 112, ¶ 6. *Id.*

Dyfan contends that the terms in this group—and more generally Terms 16-30—should not be subject to § 112, ¶ 6 because they are “part of wherein clauses that define the recited structure of the claims (e.g., the system that includes a building, broadcast, short range communication units, etc.). There are no new and separate structural elements that Terms 16-30 are defining by functionality.” ECF No. 32 at 15-16; *see also* ECF No. 41 at 21, ECF No. 45 at 8-9.

Based on the language of the Term 28, the Court concludes that the term recites purely functional language without sufficient structure. In particular, the Term 28 provides that “the system is configured such that the subsequent output of the different visual information is capable of being caused without additional user input after the user input.” At its essence, Term 28 only requires that the output of different visual information does not need additional user input. Based on the claim language, the Court agrees with Target that the claims do not specify which of the components in the system perform this particular function. At best, it is unclear which of the recited components perform the specified function; at worst, an unspecified black box component in lieu of the recited components performs the specified function. In either case, the Court concludes that Term 28 fails to “recite sufficiently definite structure or else recites function without

reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1349 (internal quotations removed).

Target contends that the Term 28 is indefinite “[f]or at the least the same reasons that there is no disclosure of any specific algorithm clearly linked to performing either of the ‘code’-based ‘caus[ing] to be output’ functions, and additionally because the claim language here does not even limit the corresponding structure to software[.]” ECF No. 31 at 21 (internal citations removed).

Dyfan makes at least two arguments regarding whether Term 28 is indefinite for lack of corresponding structure. First, Dyfan contends that because the Term 28 is part of a “wherein” clause (*i.e.*, “wherein the system is configured”) which further “delineate[s] the one or more structures of the system.” ECF No. 32 at 15. Second, Dyfan contends that the opinions of Target’s expert—Dr. Goldberg—are flawed because he failed to review communications protocols, standards, and the prosecution history. ECF No. 41 at 19, 22.

The Court finds that Term 28 is indefinite for lack of corresponding structure. More specifically, the Court agrees with Target’s arguments that there is even less corresponding structure for Term 28 than there was for Term 14, because the latter at least required “code.” Furthermore, the Court does not find that any recited communication protocols, *e.g.*, Bluetooth, are clearly linked to the recited function. *Twin Peaks Software Inc. v. IBM Corp.*, 690 Fed. Appx. 656, 660 (Fed. Cir. 2017) (describing prior cases as “holding that ‘a bare statement that known techniques or methods can be used does not disclose structure’” and “noting ‘[t]he requirement that a particular structure be clearly linked with the claimed function in order to qualify as corresponding structure.’”).

The Court does not find Dyfan’s first argument to be persuasive because although the “wherein” clause further specifies an aspect of a system, it does not necessarily in-and-of-itself

provide structure for at least two reasons. First, Dyfan incorrectly presupposes that “system” has structure. Rather, “system” may be a nonce word. *See, e.g., Joao Control & Monitoring Sys., LLC v. Protect America, Inc.*, No. 1-14-cv-134-LY, 2015 WL 4937464, at *5 (W.D. Tex. Aug. 18, 2015) (“The court finds that system, as used in the claim, functions merely as a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term ‘means for.’”) (internal citations removed). As such, a “wherein” clause that further limits a potential nonce word such as “system” does not necessarily mean that the potential nonce word provides sufficient structure, by itself and/or in conjunction with the further limitation found in the “wherein” clause. Second, even if “system” were not a nonce word, it does not necessarily follow that an associated “wherein” clause necessarily has corresponding structure. Rather, the “wherein” clause may add additional functionality to the system or further limit the system in the form of a black box component.

The Court notes that it did not based its conclusion on any of Dr. Goldberg’s opinions.

Likewise, because representative Term 28 is the indefinite, Terms 16, 17, 21, and 29 are also indefinite for failing to disclose corresponding structure.

f. Group 4 terms: Terms 23, 24, and 25

Because Dyfan made the same arguments for the Group 4 terms as it did for the Group 3 terms, the Court likewise concludes that the terms in this group are subject to § 112, ¶ 6 and are also indefinite for lack of corresponding structure. ECF Nos. 32 at 15-16 (making common arguments for Terms 16-30), 41 at 20-22 (same); 45 at 3-11 (same).

g. Ungrouped terms: Terms 6-9, 18-20, 22, 26-27, and 30

Target contends that the same arguments for the grouped terms also apply to the ungrouped terms, *i.e.*, Terms 6-9, 18-20, 22, 26-27, and 30. ECF No. 31 at 9 n.4. Dyfan, by making common

arguments for grouped and ungrouped terms, implicitly does the same. ECF Nos. 32 at 13-15 (making common arguments for Terms 6-15), 15-16 (making common arguments for Terms 16-30); 41 at 13-20 (Terms 6-15), 20-22 (Terms 16-30); 45 at 3-11 (Terms 6-30).

After analyzing the ungrouped terms, and considering the parties' corresponding arguments, the Court concludes that the Terms 6-9, 18-20, 22, 26-27, and 30 are subject to § 112, ¶ 6 and are indefinite for lack of corresponding structure.

IV. SUMMARY

To summarize, the Court enters the following final constructions for each of the disputed terms.

No.	Claim Term	Court's Final Construction
1	"building including a plurality of facilities therein" ('292 Claims 1, 15, 28)	Plain-and-ordinary meaning
2	"shopping mall" ('899 Claims 2, 7, 12, 30; '292 Claims 4, 13, 26, 29)	Plain-and-ordinary meaning
3	"an identifier including at least three fields" ('899 Claim 1)	Plain-and-ordinary meaning
4	"an address portion" ('899 Claims 1, 7, 9, 11, 30; '292 Claim 4)	Plain-and-ordinary meaning
5	"output, via the at least one mobile device" / "causing to be output, via the at least one mobile device" / "cause to be output, via the at least one mobile device" ('899 Claims 1, 7, 9, 11; '292 Claims 1, 15, 28)	Plain-and-ordinary meaning
6	"an application [computer code] configured for[to be] execution [executed] by at least one of a plurality of mobile devices . . . the application when executed causes the at least one mobile device to [the computer code, when executed, configured to] [the application, when executed, configured to] . . .[cause] display of an option via a display of the at least one mobile device" ('899 Claims 1, 7, 9, 11)	Subject to 35 U.S.C. § 112(6) Function: "[cause / causes the at least one mobile device to] display of an option via a display of the at least one mobile device" Structure: Indefinite

7	<p>“code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to . . . cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device” (’292 Claims 1, 15, 28)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device”</p> <p>Structure: Indefinite</p>
8	<p>“an application configured for execution by [configured to be executed by] at least one of a plurality of mobile devices . . . the application when executed causes the at least one mobile device to [configured to] . . . receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the Bluetooth [first] wireless communications protocol, of the one or more messages including the address portion and the identifier including the at least three fields [, the plurality of fields,] and the at least one value” / “computer code configured for execution by at least one of a plurality of mobile devices . . . the computer code, when executed, configured to . . . receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the short-range first wireless communications protocol, of the one or more messages including the address portion, the at least three fields, and the at least one value” / “code configured for execution by at least one of a plurality of mobile devices . . . the code, when executed, configured to . . . receive an indication of a receipt from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value” (’899 Claims 1, 7, 9, 11; ’292 Claims 1, 15, 28)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “receive an indication of a receipt, without solicitation from the at least one broadcast short- range communications unit and via the Bluetooth [first] wireless communications protocol, of the one or more messages including the address portion and the identifier including the at least three fields [, the plurality of fields,] and the at least one value” / “receive an indication of a receipt, without solicitation from the at least one broadcast short-range communications unit and via the short-range first wireless communications protocol, of the one or more messages including the address portion, the at least three fields, and the at least one value” / “receive an indication of a receipt from the first broadcast short- range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value”</p> <p>Structure: Indefinite</p>
9	<p>“code configured to be executed by at least one of the plurality of mobile devices, the</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p>

	code, when executed, configured to . . . receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value” ('292 Claims 1, 15, 28)	Function: “receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value” Structure: Indefinite
10	“said application, when executed, further configured to . . . in response to the receipt, from the at least one server and via the another wireless communications protocol, of the response message including the particular location-relevant information; control, utilizing the application, the one or more mobile device application actions of the application including causing to be output, via the at least one mobile device, the mobile device application visual information based on the particular location-relevant information” ('899 Claim 1)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “in response to the receipt, from the at least one server and via the another wireless communications protocol, of the response message including the particular location-relevant information; control . . . the one or more mobile device application actions of the application including causing to be output, via the at least one mobile device, the mobile device application visual information based on the particular location-relevant information” Structure: Indefinite
11	“said application, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information: cause, utilizing the application, the one or more mobile device application actions including causing to be output, via the at least one mobile device, the visual information based on the particular location-relevant information” / “computer code, when executed, further configured to . . . in response to [after] the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information from the at least one server and via the second wireless communications protocol; cause, utilizing the computer code, the one or more mobile device actions including causing to be output, via the at least one mobile device,	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information: cause, utilizing the application, the one or more mobile device application actions including causing to be output, via the at least one mobile device, the visual information based on the particular location-relevant information” / “in response to [after] the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the particular location-relevant information from the at least one server and via the second wireless communications protocol; cause, utilizing the computer code, the one or more mobile device actions including causing to be output, via the at least one mobile device, the visual information based on the

	<p>the visual information based on the particular location-relevant information” / “code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” (’899 Claims 7, 9, 11; ’292 Claim 1)</p>	<p>particular location-relevant information” / “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information”</p> <p>Structure: Indefinite</p>
12	<p>“said code, when executed, further configured to . . . in response to the receipt, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, of the first response message including the first location-relevant information [of the first location-relevant information]: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information” (’292 Claims 15, 28)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “in response to the receipt, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, of the first response message including the first location-relevant information [of the first location-relevant information]: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information”</p> <p>Structure: Indefinite</p>
13	<p>“said code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” (’292 Claim 1)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”</p>

		Structure: Indefinite
14	<p>“said code, when executed, further configured to . . . after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”</p> <p>(’292 Claim 15)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”</p> <p>Structure: Indefinite</p>
15	<p>“said code, when executed, further configured to . . . after the receipt, from the at least one server and via the second wireless communications protocol, of the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”</p> <p>(’292 Claim 28)</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the receipt, from the at least one server and via the second wireless communications protocol, of the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information”</p> <p>Structure: Indefinite</p>
16	<p>“the system is configured such that, after the indication of the user input is received and after an initial instance of the output of the mobile device application visual information including the image [the output of the visual information] is caused, subsequent instances of the output of the mobile device application visual information including different images [the output of the visual information] are capable of being caused as a user moves</p>	<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: “after the indication of the user input is received and after an initial instance of the output of the mobile device application visual information including the image [the output of the visual information] is caused, subsequent instances of the output of the mobile device application visual information including different images [the output of the visual</p>

	among a plurality of the facilities of the building [as a user moves,], without requiring [necessitating] additional subsequent user input” (’899 Claims 1, 7, 9)	information] are capable of being caused as a user moves among a plurality of the facilities of the building [as a user moves,], without requiring [necessitating] additional subsequent user input” Structure: Indefinite
17	“the system is further configured such that, after the indication of the user input is received and after the output of the visual information is caused, subsequent output of different visual information is caused as the at least one mobile device is moved among a plurality of the facilities of the building” (’899 Claim 11)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the indication of the user input is received and after the output of the visual information is caused, subsequent output of different visual information is caused as the at least one mobile device is moved among a plurality of the facilities of the building” Structure: Indefinite
18	“the system is further configured such that the option and the user input permit the user to determine whether the control of the one or more mobile device application actions is triggered” (’899 Claim 1)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the option and the user input permit the user to determine whether the control of the one or more mobile device application actions is triggered” Structure: Indefinite
19	“the system is further configured [configured] such that the option and the user input permit the user to influence whether the one or more mobile device actions is caused” (’899 Claim 7, 9)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the option and the user input permit the user to influence whether the one or more mobile device actions is caused” Structure: Indefinite
20	“the application, when executed, is configured to permit a determination as to whether the one or more mobile device application actions including causing to be output the visual information is triggered” (’899 Claim 11)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “permit a determination as to whether the one or more mobile device application actions including causing to be output the visual information is triggered” Structure: Indefinite
21	“the system is configured such that different brand-specific visual information is caused to be output as the user moves among the plurality of facilities of the shopping mall” “the system is configured such that different	Subject to 35 U.S.C. § 112, ¶ 6 Function: “different brand- specific visual information is caused to be output as the user moves among the plurality of facilities

	product-type- specific visual information is caused to be output as the user moves among the different locations of the retail store” (’899 Claim 7, 9)	of the shopping mall” / “different product-type-specific visual information is caused to be output as the user moves among the different locations of the retail store” Structure: Indefinite
22	“the system is configured such that the output of the mobile device application visual information [the visual information] is conditionally caused based on whether a mobile device-specific threshold has been met” / “the system is configured such that the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device- specific threshold has been met” (’899 Claims 4, 14; ’292 Claims 5, 18)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the output of the mobile device application visual information [the visual information] is conditionally caused based on whether a mobile device- specific threshold has been met” / “the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device-specific threshold has been met” Structure: Indefinite
23	“the system is configured such that, after the receipt of the indication of the user input, the visual information is automatically caused to be output, in response to the receipt of the indication of the receipt of the one or more messages that are broadcasted after the receipt of the indication of the user input” / “the system is configured such that, after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input” (’899 Claim 18; ’292 Claims 8, 21)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “after the receipt of the indication of the user input, the visual information is automatically caused to be output, in response to the receipt of the indication of the receipt of the one or more messages that are broadcasted after the receipt of the indication of the user input” / “after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input” Structure: Indefinite
24	“the system is configured such that the visual information is automatically caused	Subject to 35 U.S.C. § 112, ¶ 6

	to be output without requiring further communication with the at least one broadcast short-range communications unit, after the receipt of the indication of the receipt of the one or more messages” (’899 Claim 19)	Function: “the visual information is automatically caused to be output without requiring further communication with the at least one broadcast short-range communications unit, after the receipt of the indication of the receipt of the one or more messages” Structure: Indefinite
25	“the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one [first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one [second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages” (’292 Claims 1, 15, 28)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the first visual information is automatically caused to be output without requiring communication of the at least one [first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one [second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages” Structure: Indefinite
26	“the system is configured such that the one or more mobile device application actions is based on user feedback information received from a user of the at least one mobile device” (’899 Claim 23)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the one or more mobile device application actions is based on user feedback information received from a user of the at least one mobile device” Structure: Indefinite
27	“the system is configured such that both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device” (’292 Claims 11, 25)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device” Structure: Indefinite
28	“the system is configured such that the subsequent output of the different visual	Subject to 35 U.S.C. § 112, ¶ 6

	information is capable of being caused without additional user input after the user input” (’899 Claim 25)	Function: “the subsequent output of the different visual information is capable of being caused without additional user input after the user input” Structure: Indefinite
29	“the system is configured such that both the first visual information and the second visual information are output without additional user input after the user input” (’292 Claim 12)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “both the first visual information and the second visual information are output without additional user input after the user input” Structure: Indefinite
30	“the system is configured such that the particular location- relevant information is located based on the at least on value” (’899 Claim 28)	Subject to 35 U.S.C. § 112, ¶ 6 Function: “the particular location-relevant information is located based on the at least on value” Structure: Indefinite